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The creation of junior schoolchildren's interest in the experimental study of physical phenomena using the elements of the technology of problem-based

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2018 Sabirova F.M, Deryagin, A. V. The goal of the paper is to define the place and role of the technology of problem-based learning in demonstrating physical phenomena and processes to junior schoolchildren within a framework of the Child University and InteLSummer projects of Elabuga Institute of Kazan Federal University for higher interest in learning physics - a science about nature. The method is the technology of problem-based learning. Children face a certain problem, which is a cognitive task, and students (themselves or assisted by a teacher) investigate the ways and methods to solve it. We can use the elements of problem-based technology (creation of a problem, joint scientific learning, and primary reinforcement of the obtained knowledge) in teaching junior schoolchildren. Results: we considered the ways of creating particular problem situations with both a teacher and, most importantly, children participating in their solution on the example of a cycle of l aboratory and practical classes devoted to electrical and magnetic phenomena. In the end, the experience of applying the technology of problem-based learning has shown that children's participation in looking for the ways to solve a learning problem supports a cognitive int erest of junior schoolchildren in the study of physical phenomena. The participation of pedagogical university students - future teachers - in the Child University and Intel Summer projects is a perspective form of a practice-oriented approach tofuture professional activity.

Keywords

Experiment, Electricity, Experimental check, Interest in learning, Junior schoolchild, Magnet, Magnetism, Motivation, Physical properties, Physics, Problem-based learning, Technology

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